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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,813	06/23/2003	Natarajan Ramachandran	D-1181 R1	9839
28995	7590	05/03/2006	EXAMINER	
RALPH E. JOCKE walker & jocke LPA 231 SOUTH BROADWAY MEDINA, OH 44256			HESS, DANIEL A	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/601,813

Applicant(s)

RAMACHANDRAN ET AL.

Examiner

Daniel A. Hess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C., § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/3/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>4/27/06</u>                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This action is in response to the filing of an appeal brief on 3/3/06. This action is a **supplemental final**. The Examiner rejected a number of claims using the 35 USC 103 statute, when the 35 USC 102 statute should have been used because various claims were actually fully anticipated.

Since the examiner already indicated that anticipation is present for some claims in the previous action (bottom of page 3) and since the same rejection is essentially used, and since all the various limitation were already pointed out, finality is maintained.

#### ***Remark Regarding Restriction Requirement***

The restriction requirement that had been made is maintained. The Applicant's argument is considered but is not considered persuasive.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 14-19, 24, 26, 29 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Mair et al. (US 6,367,695).

Re claim 1: For the sake of clarity, individual limitations in the claim are recited below in italics, followed in each case by a discussion of how the prior art meets the claimed limitation.

**But in order to fully understand Mair et al., the Applicant is advised to carefully review figure 3 and column 5, lines 15-45, because there are two embodiments (figure 2, and figure 3 which are different), and this is the embodiment that the Applicant should focus on.**

*An automated banking machine apparatus comprising:*

*a housing;*

See figure 3, which is a profile of the ATM (column 5, line 16). A housing is clearly shown. Figure 1, a front view, shows this as well.

*a user interface in supporting connection with the housing, the user interface including at least one input device and at least one output device, wherein the at least one input device includes a card reader having an associated card reader slot adapted to accept cards input by users of the apparatus;*

A user interface is clearly shown in figure 1. An input device, namely a card reader, is at 12. Another input device, a keypad, is at 16. The inputting of a card into the card reader slot is shown in figure 1.

*at least one radiation emitting device positioned adjacent the slot;*

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See figure 3 and column 5, lines 15-45. Ref. 12 is the card reader slot. An infrared emitter 108, seen in figure 3, is adjacent to the card slot 12.

*at least one radiation sensing device adjacent the slot such that positioning an unauthorized card reading device adjacent the slot causes a change in at least one property of radiation from the at least one radiation emitting device that is sensed by the at least one radiation sensing device;*

Radiation sensing device 102 is adjacent the card slot 12.

As column 5, lines 38-45 recite: “If a false sheet 118 (shown in FIG. 3 by a broken line) having a **false card reader slot is placed over the lower part of the ATM, the signals from the emitter 108 are interrupted and do not reach the detector 102.** This condition causes the comparator 112 to issue an alarm signal to activate an alarm circuit 120 and thus alert the ATM operator, and de-activate the ATM.”

*at least one controller in the housing, wherein the at least one controller is in operative connection with the at least one radiation sensing device and is operative to generate at least one signal responsive to the change, whereby installation of an unauthorized card reading device adjacent the slot is indicated.*

There is a controller, namely a comparator 112 which connects with the radiation sensing device and generates an alarm signal (which clearly is indicative of an unauthorized card reading device: Mair et al. uses the term “false card reader slot” which is the same thing).

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As column 5, lines 38-45 recite: "If a false sheet 118 (shown in FIG. 3 by a broken line) having a false card reader slot is placed over the lower part of the ATM, the signals from the emitter 108 are interrupted and do not reach the detector 102. This condition causes the comparator 112 to issue an alarm signal to activate an alarm circuit 120 and thus alert the ATM operator, and deactivate the ATM."

Re claim 2: See column 4, line 30: There is a cash dispensing slot.

Re claim 14: See figure 3. The card slot is 21. The detector and emitter are shown; they must be somewhat supported by housing member; if they were not supported, they would not be held where figure 14 shows they are held.

Re claim 15: This feature of 'extending in surrounding relation' is illustrated by the concavity of the ATM shown in figure 1.

Re claim 16: See discussion re claim 1.

As far as the difference between claim 1 and claim 16, it is clear that the controller drives the emitter and is responsive to the detector:

See column 2, lines 52+: " Preferably, the emitter emits an encoded series of pulses or another form of encoded or encrypted signal; use of an encoded signal will make it more difficult to imitate the emitted signal."

From this is clear that the controller initiates pulses.

Re claims 17 and 18: See discussion re claim 1 above.

Re claim 19: See discussion re claims 1 and 16 above. Note especially Mair et al. teaches (column 5, lines 19-26) :

**“In this example the detector 102 is positioned at the top edge of slot 12”**

Re claim 24: See figure 3, where the emitter and detector are clearly on opposite sides of the slot 12.

Re claim 26: See discussion re claims 1 and 16 above.

Re claim 29: See figure 3, where the emitter and detector are clearly on opposite sides of the slot 12.

Re claim 32: See discussion re claims 1 and 16.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 3-13, 20-23, 25, 27, 28, 30, 31 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mair et al. (US 6,367,695).

Re claim 3:

Mair et al. teaches (column 5, lines 50-65):

” It will be apparent that various modifications and improvements may be made to the arrangements described above without departing from the scope of the invention. For example, **any suitable form of signal** may be used”

Lacking is specific use of a signal in the visible range, but Mair clearly allows for different types of signals. Also, light emission and detection in the visible range is clearly well-known.

In the present case, a signal in the visible range would have been an obvious improvement because then a would be lawbreaker may be deterred from even tampering with the machine, because operating in the visible range clearly shows the presence of a defense system.

Re claim 4: See column 2, lines 52+:

” Preferably, the emitter emits an encoded series of pulses or another form of encoded or encrypted signal; use of an encoded signal will make it more difficult to imitate the emitted signal.”

From this is clear that the controller initiates pulses.

While it is not specifically shown that the controller creates pulses during insertion or ejection of the card, Mair et al. would be rendered somewhat less ineffective if he avoided these times, and it appears Mair et al. samples quite often. It would have been obvious to one of



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ordinary skill in the art at the time the invention was made to sample around the time of insertion or ejection because these are the times when data could actually be stolen.

Re claims 5 and 6: Clearly a comparison is made by the comparator between two states 'object present' and 'object absent': This requires a data store having at least a baseline for comparing these two states.

This claim really amounts to calibration, which is standard among systems having sensors.

Re claim 7: In the event of a detection event (column 5, lines 40-45) an ATM operator is notified.

Re claims 8 and 9: ATM is deactivated if an object is detected, this would certainly somehow, be reflected on the user interface.

As for a specific message explaining the problem, this would have been obvious because it serves as a warning to a user and also as an explanation to a would-be technician.

Re claim 10: As stated re claim 5, there needs to be a data store having at least a baseline for comparing these two states. Clearly one of the simplest ways to set the baseline is simply to start by storing an 'object absent' state which is a current state.

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Re claims 11: The phrase “surroundingly illuminate” is broad and does not reflect any particular illumination pattern.

Re claim 12: See discussion re claims 5/6.

Re claim 13: One feature (column 5, lines 45-55) is that under certain circumstances of normal use, interruption of the signals will not lead to an alarm. This is a form of fuzzy logic.

Re claims 20-22: See discussion re claims 5-9 above.

Re claim 23: See discussion re claim 1 above, as well as discussion of fuzzy logic re claim 13 above.

Re claim 25: See discussion re claim 11, above.

Re claim 27/28: See discussion re claim 9, above.

Re claim 30/31: See discussion re claims 5/6.

Re claim 33: See discussion re claim 4, above.

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Re claim 34: See discussion re claim 11, and note that currency dispensing is inherent for the machine is an ATM.

Re claim 35:

See discussion re claim 1, above.

In Mair et al. the machine deactivates if there is a detection of an illicit reading device (column 5, line 45). If the card is in the ATM when it is deactivated it would likely remain in the ATM.

Re claim 36: See discussion re claim 1, above. Records are normally kept of ATM transactions; if a machine is compromised, this would normally be traceable, and the natural response by a user to knowledge that their account may have been compromised would have been to cancel the account. This examiner has taken that kind of action in the past.

Re claim 37: See discussion re claim 1, above; also re claim 36: If a user is not sure if their account has been compromised, the natural response by the user would have been to monitor the account over a period of time to determine whether the account has been compromised. This examiner has taken that kind of action in the past.

### ***Response to Arguments***

Applicant's arguments filed 3/3/06 have been fully considered but they are not persuasive.

The whole error in the Applicant's position is that he is **arguing the wrong embodiment**. There are two separate embodiments presented in Mair et al. (US 6,367,695). In the **first embodiment (figure 2)**, discussed at column 4, line 34 to column 5 line 15, there are

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sensors associated with the keypad to guard against a false keypad. In the **second embodiment (figure 3)**, discussed at column 5, line 15 to column 5, line 45, there are sensors of the type claimed, adjacent to the card slot, to defend against a “false card reader slot” (column 5, line 40). Mair et al. is quite clear that there are two embodiments, using the explicit language “second embodiment” (column 5, line 17).

The Examiner has argued the second embodiment, but the Applicant continually argues the first embodiment. It is the second embodiment that anticipates claim 1 and many other claims.

The Examiner does not disagree with many of the points that the Applicants make but simply notes that they deal with the wrong embodiment, not the embodiment that is at issue in the Instant case.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

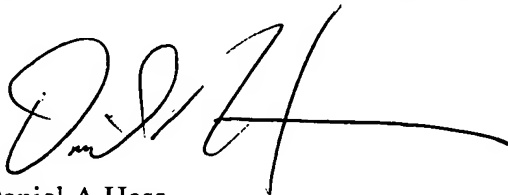
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel A Hess  
Examiner  
Art Unit 2876  
4/24/06



**DANIEL STCYR  
PRIMARY EXAMINER**